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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,736	05/30/2001	Yutaka Asanuma	04329.2575	5764
22852	7590	06/28/2005	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			DUONG, FRANK	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

09/866,736

Applicant(s)

ASANUMA, YUTAKA

Examiner

Frank Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/18/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is a response to communications dated 04/18/05. Claims 1-6 and 8-14 are pending in the application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6 and 8-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Dohi et al (USP 6,341,224) (hereinafter "Dohi").

Regarding **claim 1**, in accordance with Dohi reference entirety, Dohi shows a radio communication system (Fig. 3 or 4) capable of making connection in code division multiple access (CDMA) radio communication between a base station and a mobile station (*col. 1, lines 15-22*), for controlling a transmission power level in one of said base station and said mobile station in accordance with a reception power level in the other station, said radio communication system comprising:

a detector (*Fig. 3; element 10*) configured to detect a fluctuation rate (*frame error*) of a transmission path (*col. 5, lines 30-42*); and

a controller (*Fig. 3; element 6*) configured to average a reception power level in a transmission signal of said one station received by said other station with a predetermined cycle and for controlling the transmission power level in said one station in accordance with said averaged reception power level, when the fluctuation rate detected by said detector is equal to or higher than a first threshold value and lower than a second threshold value, and to average the reception power level of the transmission signal of said one station received by said other station with a cycle longer than said predetermined cycle and for controlling the transmission power level in said one station in accordance with said averaged reception power level, when the fluctuation rate detected by said detector is lower than the first threshold value or equal to or higher than the second threshold value (*col. 5, line 9 to col. 6, line 32 and thereafter*).

Regarding **claim 2**, in accordance with Dohi reference entirety, Dohi shows a radio communication system (*Fig. 3 or 4*) capable of making connection in code division multiple access (CDMA) radio communication between a base station and a mobile station, for controlling a transmission power level in said mobile station in accordance with a reception power level in said base station (*col. 1, lines 15-22*), said radio communication system comprising:

a detector (*Fig. 3; 10*) configured to detect a fluctuation rate (frame error) of a transmission path (*col. 5, lines 30-42*); and

a controller (*Fig. 3; 6*) configured to average a reception power level in a transmission signal of said mobile station received by said base station with a

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predetermined cycle and for controlling the transmission power level in said mobile station in accordance with said averaged reception power level, when the fluctuation rate detected by said detector is equal to or higher than a first threshold value and lower than a second threshold value, and for averaging the reception power level of the transmission signal in said mobile station received by said base station with a cycle longer than said predetermined cycle and for controlling the transmission power level of said mobile station in accordance with said averaged reception power level, when the fluctuation rate detected by said detector is lower than the first threshold value or equal to or higher than the second threshold value (col. 5, line 9 to col. 6, line 32 and thereafter).

Regarding **claim 3**, in accordance with Dohi reference entirety, Dohi shows a radio communication system (Fig. 3 or 4) capable of making connection in code division multiple access (CDMA) radio communication between a base station and a mobile station, for controlling a transmission power level of said base station in accordance with a reception power level in said mobile station (col. 1, lines 15-22), said radio communication system comprising:

a detector (Fig. 3; 11) configured to detect a fluctuation rate (frame error) of a transmission path; and

a controller (Fig. 3; 6) configured to average a reception power level of a transmission signal in said base station received by said mobile station with a predetermined cycle and for controlling the transmission power level of said base station in accordance with said averaged reception power level, when the fluctuation

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rate detected by said detector is equal to or higher than a first threshold value and lower than a second threshold value, and for averaging the reception power level of the transmission signal in said base station received by said mobile station with a cycle longer than said predetermined cycle and for controlling the transmission power level of said base station in accordance with said averaged reception power level, when the fluctuation rate detected by said detector is lower than the first threshold value or equal to or higher than the second threshold value (*col. 5, line 9 to col. 6, line 32*).

Regarding **claim 4**, in accordance with Dohi reference entirety, Dohi discloses a transmission power controlling method (Fig. 3 or 4) for use in a radio communication system allowing a base station to make code division multiple access (CDMA) radio communication with a mobile station, for controlling a transmission power level in one of said base station and said mobile station in accordance with a reception power level in the other of said base station and said mobile station (*col. 1, lines 15-22*), said transmission power controlling method comprising the steps of:

detecting a fluctuation rate (frame error) of a transmission path (*col. 5, lines 30-42*); and

averaging a reception power level of a transmission signal in said one station received by said other station with a predetermined cycle and controlling the transmission power level of said one station in accordance with said averaged reception power level, when the fluctuation rate detected at said detecting step is equal to or higher than a first threshold value and lower than a second threshold value, and

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averaging the reception power level of the transmission signal in said one station received by said other station with a cycle longer than said predetermined cycle and controlling the transmission power level of said one station in accordance with said averaged reception power level, when the fluctuation rate detected at said detecting step is lower than the first threshold value or equal to or higher than the second threshold value (col. 5, line 9 to col. 6, line 32).

Regarding **claim 5**, in accordance with Dohi reference entirety, Dohi discloses transmission power controlling method for use in a radio communication system allowing a base station to make code division multiple access (CDMA) radio communication with a mobile station, for controlling a transmission power level in said mobile station in accordance with a reception power level in said base station, said transmission power controlling method comprising the steps of:

detecting a fluctuation rate of a transmission path (col. 5, lines 30-42); and averaging a reception power level of a transmission signal in said mobile station received by said base station with a predetermined cycle and controlling the transmission power level in said mobile station in accordance with said averaged reception power level, when the fluctuation rate detected at said detecting step is equal to or higher than a first threshold value and lower than a second threshold value, and averaging the reception power level of the transmission signal in said mobile station received by said base station with a cycle longer than said predetermined cycle and controlling the transmission

power level of said mobile station in accordance with said averaged reception power level, when the fluctuation rate detected at said detecting step is lower than the first threshold value or equal to or higher than the second threshold value (col. 5, line 9 to col. 6, line 32).

Regarding **claim 6**, in accordance with Dohi reference entirety, Dohi discloses a transmission power controlling method, for use in a radio communication system allowing a base station to make code division multiple access (CDMA) radio communication with a mobile station, for controlling a transmission power level of said base station in accordance with a reception power level of said mobile station, said transmission power controlling method comprising the steps of:

detecting a fluctuation rate of a transmission path (col. 5, lines 30-42); and
averaging a reception power level of a transmission signal in said base station received by said mobile station with a predetermined cycle and controlling the transmission power level in said base station in accordance with said averaged reception power level, when the fluctuation rate detected at said detecting step is equal to or higher than a first threshold value and lower than a second threshold value, and averaging the reception power level of the transmission signal in said base station received by said mobile station with a cycle longer than said predetermined cycle and controlling the transmission power level in said base station in accordance with said averaged reception power level, when the fluctuation rate detected at said detecting step is lower than the first

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threshold value or equal to or higher than the second threshold value (col. 5, line 9 to col. 6, line 32).

Regarding **claim 8**, in accordance with Dohi reference entirety, Dohi shows mobile communication terminal for making code division multiple access (CDMA) radio communication with a base station, measuring a reception power level of a transmission signal from said base station and allowing said base station to control a transmission power level in said radio communication station in accordance with said measured reception power level, said mobile communication terminal comprising:

a first detector (Fig. 3; 10) configured to detect a fluctuation rate (frame error) of a transmission path with said base station;

a second detector (Fig. 3; 6) configured to average the reception power level of the transmission signal in said base station with a predetermined cycle, when the fluctuation rate detected by said first detector is equal to or higher than a first threshold value and lower than a second threshold value, and for averaging the reception power level of the transmission signal in said base station with a cycle longer than said predetermined cycle, when the fluctuation rate detected by said first detector is lower than the first threshold value or equal to or higher than the second threshold value (col. 5, line 9 to col. 6, line 13); and

a transmitter (Fig. 3; 13-18 and 2, 1) configured to transmit information based on the reception power level obtained by said second detector to said base station (col. 6, lines 14-32)

Regarding **claim 9**, in accordance with Dohi reference entirety, Dohi shows base station apparatus for making code division multiple access (CDMA) radio communication with a mobile station, measuring a reception power level of a transmission signal from said mobile station and allowing said mobile station to control a transmission power level in said radio communication station in accordance with said measured reception power level, said base station apparatus comprising:

a first detector (Fig. 3; 10) configured to detect a fluctuation rate (frame error) of a transmission path with said mobile station (col. 6, lines 30-42);

a second detector (Fig. 3; 6) configured to average the reception power level of the transmission signal in said mobile station with a predetermined cycle, when the fluctuation rate detected by said first detector is equal to or higher than a first threshold value and lower than a second threshold value, and for averaging the reception power level of the transmission signal in said mobile station with a cycle longer than said predetermined cycle, when the fluctuation rate detected by said first detector is lower than the first threshold value or equal to or higher than the second threshold value (col. 5, line 9 to col. 6, line 13); and

a transmitter (Fig. 3; 13-18 and 2, 1) configured to transmit information based on the reception power level obtained by said second detector to said mobile station (col. 6, line 14-42).

Regarding **claim 10**, in accordance with Dohi reference entirety, Dohi discloses transmission power controlling method for use in a radio communication station making code division multiple access (CDMA) radio communication, for measuring a power level in a reception signal by said radio communication station and controlling a transmission power level in a transmitting station transmitting said received signal in accordance with said measured reception power level, said transmission power controlling method comprising:

a first detection step (Fig. 3; 10) of detecting a fluctuation rate (frame error) of a transmission path with said radio communication station (col. 5, lines 30-42);

a second detection step (Fig. 3; 6) of averaging the reception power level of the transmission signal in said radio communication station with a predetermined cycle, when the fluctuation rate detected at said first detection step is equal to or higher than a first threshold value and lower than a second threshold value, and averaging the reception power level of the transmission signal in said radio communication station with a cycle longer than said predetermined cycle, when the fluctuation rate detected at said first detection step is lower than the first threshold value or equal to or higher than the second threshold value (col. 5, line 9 to col. 6, line 13); and

a transmission step (Fig. 3; 13-18, 2 and 1) of transmitting information based on the average reception power level obtained at said second detection step to said radio communication station (col. 6, lines 14-32).

Regarding **claim 11**, in accordance with Dohi reference entirety, Dohi discloses transmission power controlling method for use in a mobile station which is connected to a base station by code division multiple access (CDMA) radio communication, for measuring a power level of a signal received from said base station and controlling a transmission power level of said base station in accordance with said measured reception power level, said transmission power controlling method comprising:

a first detection step (Fig. 1; 10) of detecting a fluctuation rate (frame error) of a transmission path with said base station;

a second detection step (Fig. 3; 6) of averaging the reception power level of the transmission signal in said base station with a predetermined cycle, when the fluctuation rate detected at said first detection step is equal to or higher than a first threshold value and lower than a second threshold value, and averaging the reception power level of the transmission signal in said base station with a cycle longer than said predetermined cycle, when the fluctuation rate detected at said first detection step is lower than the first threshold value or equal to or higher than the second threshold value (col. 5, line 9 to col. 6, line 13); and

a transmission step (Fig. 3; 13-18, 2 and 1) of transmitting information based on the reception power level obtained at said second detection step to said base station (col. 6, lines 14-32).

Regarding **claim 12**, in accordance with Dohi reference entirety, Dohi shows transmission power controlling method for use in a base station connected to a mobile station by code division multiple access (CDMA) radio communication, for measuring a power level of a signal received from said mobile station and controlling a transmission power level of said mobile station in accordance with said measured reception power level, said transmission power controlling method comprising:

a first detection step of detecting a fluctuation rate of a transmission path with said mobile station (col. 5, lines 30-42);

a second detection step of averaging the reception power level of the transmission signal in said mobile station with a predetermined cycle, when the fluctuation rate detected at said first detection step is equal to or higher than a first threshold value and lower than a second threshold value, and averaging the reception power level of the transmission signal in said mobile station with a cycle longer than said predetermined cycle, when the fluctuation rate detected at said first detection step is lower than the first threshold value or equal to or higher than the second threshold value (col. 5, line 9 to col. 6, line 13); and

a transmission step of transmitting information based on the reception power level obtained at said second detection step to said mobile station (col. 6, lines 14-32).

Regarding **claim 14**, in accordance with Dohi reference entirety, Dohi shows a communication terminal (Fig. 4 and col. 6, line 33 to col. 7, line 12) for making code

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division multiple access (CDMA) radio communication with another communication terminal, said another communication terminal determining a first cycle as a control cycle when a fluctuation rate of a transmission path between said two communication terminals is equal to or higher than a first threshold value and lower than a second threshold value and determining a second cycle longer than the first cycle as the control cycle when the detected fluctuation rate is lower than the first threshold value, or equal to or higher than the-second threshold value, said communication terminal comprising:

- a first detector (Fig. 4; 22) configured to detect the control cycle determined by said another communication terminal (col. 6, lines 33-39);

- a second detector (Fig. 4; 6) configured to detect an average reception power level of a transmission signal from said another communication terminal with the detected control cycle (col. 5, lines 9-17); and

- a transmitter (Fig. 4; 13-18, 2 and 1) configured to transmit information based on the detected average reception power level to said another communication terminal to allow said another communication terminal to control the transmission power level (col. 6, lines 14-32).

Regarding **claim 15**, in accordance with Dohi reference entirety, Dohi shows a communication terminal for making code division multiple access (CDMA) radio communication with another communication terminal, said another communication terminal detecting an average reception power level of a transmission signal from said

communication terminal and transmitting the detected average reception power level to said communication terminal, said communication terminal comprising:

a first detector (Fig. 3; 10) configured to detect a fluctuation rate (frame error) of a transmission path between said two communication terminals (col. 5, lines 30-42);

means for determining a first cycle (Fig. 3; 6) as a control cycle when the fluctuation rate of a transmission path is equal to or higher than a first threshold value and lower than a second threshold value and determining a second cycle longer than the first cycle as the control cycle when the detected fluctuation rate is lower than the first threshold value, or equal to or higher than the second threshold value (col. 5, line 9 to col. 6, line 13); and

a transmitter (Fig. 3; 13-18, 2 and 1) configured to transmit the determined control cycle to said another communication terminal to allow said another communication terminal to detect the average reception power with the determined control cycle (col. 6, lines 14-32).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hamabe et al (USP 6,351,651).

Won et al, CAPACITY ENHANCEMENT BY USING OPTIMUM STEP SIZES OF CONTROLLING TARGET SIR IN A CDMA SYSTEM, IEEE, pages 1859-1863, 1998.


4. Any inquiry concerning this communication or earlier communications from the

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examiner should be directed to Frank Duong whose telephone number is 571-272-3164. The examiner can normally be reached on 7:00AM-3:30PM, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



FRANK DUONG
PRIMARY EXAMINER

June 26, 2005